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Agricultural Marketing Service

Volume 17, No. 2 April -- June 1989

Plant Variety Protection Office Official Journal







PREFACE

The Plant Variety Protection Act (7 U.S.C. 2321 et seq.) authorizes the Secretary of Agriculture to publish an Official Journal to provide the public with information relating to the operations of the Plant Variety Protection Office. The statute also authorizes the Secretary to disseminate technological and other information that encourages innovation and progress in plant breeding.

The Official Journal, published quarterly, is available from:

Plant Variety Protection Office Agricultural Marketing Service U. S. Department of Agriculture Rm. 500, NAL Bldg. 10301 Baltimore Blvd. Beltsville, Maryland 20705

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APPLICATIONS RECEIVED APPLI 1, 1989 TO JUNE 30, 1989

Applications for protection have been filed for the following varieties. Each application has been assigned an Wisconsin Agricultural Experiment Station Michigan State University, Agricultural protection. The seed of these varieties may be labeled "Uhauthorized Propagation Prohibited - U.S. Variety Pioneer Hi-Bred International, Inc. application number and will be examined to determine whether the variety is entitled to a certificate of Dairyland Seed Company, Inc. Experiment Station NAME OF APPLICANT Wymore Farms (2) 05/31/89(2) 04/03/89 04/19/89 04/18/89 (2) 04/03/89 GEN. APPL. DATE * Magnum III Mayflower Protection Applied For." WARIETY Chopper Bounty 5683 BEAN, FIELD ALFALFA 8900229 8900139 8900140 8900186 8900181 BARLEY 8

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

destifies temporary designations.

APPLICATIONS RECEIVED APRIL 1, 1989 TO JUNE 30, 1989

NAME OF APPLICANT	Rogers Brothers Seed Company	Rogers Brothers Seed Company	Rogers Brothers Seed Company	Rogers Brothers Seed Company	Rogers Brothers Seed Company	Rogers Brothers Seed Company	Rogers Brothers Seed Company	Adobe Milling Co., Inc.	Asgrow Seed Company
GEN. APPL. (*) DATE	04/19/89	04/19/89	04/19/89	04/19/89	04/19/89	04/19/89	04/19/89	(2) 05/03/89	05/12/89
VARLETY	BEAN, FIELD (Continued) 900187 <d81126></d81126>	<d81127b></d81127b>	<d82166></d82166>	<d83043></d83043>	<d83045></d83045>	<d83353></d83353>	<d83360></d83360>	Anasazi	<yp-b212></yp-b212>
APPL. NO.	BEAN, F1 8900187	8900188	8900189	8900190	8900191	8900192	8900193	8900200	8900217

(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed. < > Identifies temporary designations.

APPLICATIONS RECEIVED APRIL 1, 1989 TO JUNE 30, 1989

NAME OF APPLICANT	University of Idaho	University of Idaho	University of Idaho	Asgrow Seed Company	Asgrow Seed Campany	Asgrow Seed Company	Asgrow Seed Campany	Asgrow Seed Company	Asgrow Seed Company
APPL. DATE	(3) 06/19/89	68/61/90	68/61/90	04/11/89	04/11/89	04/11/89	04/13/89	04/13/89	04/13/89
(*)	(3)	(3)	(3)						
VARIETY	BEAN, FIELD (Continued) 900253 UI 686	UI 722	906 IN	ARDEN Acclaim	Tena	Magnum	Brio	Legion	Mustang
APPL. NO.	BEAN, F 8900253	8900254	8900255	BEAN, GARDEN 8900151 Ac	8900152	8900153	8900163	8900164	8900165

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed. < > Identifies temporary designations.

APPLICATIONS RECEIVED APRIL 1, 1989 TO JUNE 30, 1989

NAME OF APPLICANT	Vilmorin, S.A.	Vilmorin, S.A.	Asgrow Seed Company	van Waveren-Pflanzenzucht GmbH	van Waveren-Pflanzenzucht GmbH	van Waveren-Pflanzenzucht GmbH	Vilmorin S.A.	Grasslands Division Dept. of Scientific & Industrial Research
APPL. DATE	04/19/89	04/19/89	05/01/89	68/60/90	68/60/90	68/60/90	06/16/89	(1) 05/03/89
GEN. (*)								(1)
VARIETY	BEAN, GARDEN (Continued) 8900184 Label	Vilbel	Crest	Irina	Omega	<wav 610=""></wav>	Castel	BENIGRASS, COLONIAL 8900219 Grasslands Egmont
APPL. NO.	BEAN, GAR 8900184	8900185	8900199	8900245	8900246	8900247	8900248	BENTGRASS 8900219

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

< > Identifies temporary designations.

APRIL 1, 1989 TO JUNE 30, 1989 APPLICATIONS RECEIVED

NAME OF APPLICANT	Cebeco-Handelsraad	D.J. van der Have B.V.	D.J. van der Have B.V.	North American Seed Co., Inc.	Sunseeds Genetics, Inc.	TS Seeds B.V. and Meo Voto Beheer B.V.	Wilson Hybrids, Inc.	Lifaco Seed Corporation	
GEN. APPL. (*) DATE	(3) 04/19/89	06/16/89	06/16/89	04/13/89	04/18/89	68/80/50	04/13/89	68/80/50	
VARIETY	KENTUCKY Ampellia	Minstrel	Cocktail	R Snowtop	White Diamond	Minaret	D WIL500	<⊥ 127>	
APPL. NO.	BLUEGRASS, KENTUCKY 8900196 Ampellia	8900250	8900251	CAULIFIOWER 8900166	8900171	8900216	CORN, FIELD 8900156	8900201	

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed. < > Identifies temporary designations.

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APPLICATIONS RECEIVED APRIL 1, 1989 TO JUNE 30, 1989

NAME OF APPLICANT	Lifaco Seed Corporation	Lifaco Seed Corporation	Northrup King Co.	Northrup King Co.	Northrup King Co.	Northrup King Co.	Agrigenetics Company, Division of The Lubrizol Corporation
GEN. APPL. (*) DATE	68/80/50	68/80/50	05/26/89	05/26/89	68/50/90	68/50/90	06/29/89
VARIETY	CORN, FIELD (Continued) 900202 <l 135=""></l>	<l 139=""></l>	78606	W8555	E8501	792	717
APPL. NO.	CORN, FIE 8900202	8900203	8900226	8900227	8900233	8900234	8900260

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

< > Identifies temporary designations.

APPLICATIONS RECEIVED
APRIL 1, 1989 TO JUNE 30, 1989

NAME OF APPLICANT	Sally Vreseis Fox	Sally Vreseis Fox	Seed Source, Inc.	Seed Source, Inc.	Northrup King Co.	Vilmorin S.A.	Cebeco-Handelsraad	Cebeco-Handelsraad	
GEN. APPL. (*) DATE	04/14/89	04/14/89	05/11/89	05/11/89	06/19/89	06/16/89	(3) 04/19/89	(3) 04/19/89	
VARIETY	Coyote	Green	Suregrow 35	Suregrow 55	Coker 130	Scala	RED Capitol	Claudia	
APPL. NO.	COTTON 8900169	8900170	8900207	8900208	8900252	ENDIVE 8900249	FESCUE, RI 8900197	8610068	

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed. < > Identifies temporary designations.

APPLICATIONS RECEIVED APRIL 1, 1989 TO JUNE 30, 1989

Applications for protection have been filed for the following varieties. Each application has been assigned an protection. The seed of these varieties may be labeled "Unauthorized Propagation Prohibited - U.S. Variety Protection Applied For." application number and will be examined to determine whether the variety is entitled to a certificate of

NAME OF APPLICANT	Pure-Seed Testing, Inc.	Pickseed West Inc.	Daehnfeldt Inc.	Pure-Seed Testing, Inc.	Pure-Seed Testing, Inc.	International Seeds Inc.	Vilmorin, S.A.	Vilmorin, S.A.
GEN. APPL. (*)	68/80/90	04/14/89	05/22/89	68/80/90	68/80/90	06/22/89	04/19/89	04/19/89
opilea for. Variety	FESCUE, RED (Continued) 8900241 Shademaster	TALL Thoroughbred	Courtenay	Jaguar II	Winchester	Carefree	Sangria	Sudia
APPL. VARIETY NO.	FESCUE, 8900241	FESCUE, TALL 8900167 TR	8900220	8900242	8900243	8900259	LETTUCE 8900182	8900183

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

< > Identifies temporary designations.

APPLICATIONS RECEIVED APRIL 1, 1989 TO JUNE 30, 1989

NAME OF APPLICANT	Genecorp, Inc.	Bud Antle, Inc.	Cebeco-Handelsraad	Asgrow Seed Company	Asgrow Seed Company	Asgrow Seed Company	Asgrow Seed Company	Asgrow Seed Campany	Asgrow Seed Company
GEN. APPL. (*) DATE	68/30/80	68/61/90	(3) 04/04/89	04/13/89	04/13/89	04/13/89	04/13/89	04/13/89	04/13/89
VARIETY	LETTUCE (Continued) 900228 Yuppie	Bud 71-3	Renata	Aim	Karisma	Micro	Quantum	Shield	Turbo
APPL. NO.	LETTUCE (08900228	8900257	PEA 8900145	8900157	8900158	8900159	8900160	8900161	8900162

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

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APPLICATIONS RECEIVED
APRIL 1, 1989 TO JUNE 30, 1989

## APPL. VAR NO. PEA (Continued) 8900222 Ava 8900224 Boom 8900225 Prai 8900261 Dewd 8900261 Dewd 8900262 Nort	rie rop hstar	(*) DATE. 05/25/89 05/25/89 05/25/89 05/25/89 06/01/89 06/30/89	NAME OF APPLICANT Canners Seed Corporation Rogers Brothers Seed Company Rogers Brothers Seed Company
KYEGRASS, 18	Pretannial. Sherwood	04/03/89	Jonathan Green Inc./Cascade Internationa Seed Co.

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

< > Identifies temporary designations.

APPLICATIONS RECEIVED
APRIL 1, 1989 TO JUNE 30, 1989

				D	JC .	JC.	JC •	
Pure-Seed Testing, Inc.	Pure-Seed Testing, Inc.	International Seeds Inc.	SeedTec International, Inc.	Pioneer Hi-Bred International, Ir	Pioneer Hi-Bred International, Ir	Pioneer Hi-Bred International, Ir	Pioneer Hi-Bred International, Ir	
04/03/89	04/03/89	04/25/89	05/22/89	68/90/90	68/90/90	68/90/90	68/90/90	
			(3)					
PERENNIAL (Continued) <2H7>	Charger	Cutless	S-518	PHA86	PHB86	PHA82	PHB82	
RYEGRASS, 8900142	8900143	8900195	SAFFLOWER 8900221	SORGHUM 8900235	8900236	8900237	8900238	
	SS, PERENNIAL (Continued) <2H7>	SS, PERENNIAL (Continued) 04/03/89 22H7> 04/03/89 Charger 04/03/89	SS, PERENNIAL (Continued) 04/03/89 > https://doi.org/10.25/89	SS, PERENNIAL (Continued) 04/03/89 <pre><2H7></pre>	SS, PERENNIAL (Continued) 04/03/89 <pre></pre>	SS, PERENNIAL (Continued) 04/03/89 Charger 04/03/89 Cutless 04/25/89 WER S-518 (3) 05/22/89 MHA86 06/06/89	SS, PERENNIAL (Continued) 04/03/89 Charger 04/03/89 Cutless 04/25/89 WER S-518 (3) 05/22/89 PHA86 06/06/89 PHB86 06/06/89	SS, PERENNIAL (Continued)

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APPLICATIONS RECEIVED APRIL 1, 1989 TO JUNE 30, 1989

Applications for protection have been filed for the following varieties. Each application has been assigned an protection. The seed of these varieties may be labeled "Unauthorized Propagation Prohibited - U.S. Variety Protection Applied For." application number and will be examined to determine whether the variety is entitled to a certificate of

APPL. NO.	VARIETY	GEN. APPL. (*) DATE	NAME OF APPLICANT
8900239	SORO239 PH328	68/90/90	Pioneer Hi-Bred International, Inc.
8900240	PH333	68/90/90	Pioneer Hi-Bred International, Inc.
8900256	HP150	06/19/89	Holden's Foundation Seeds, Inc.
8900258	R159	06/19/89	Northrup King Co.
SOYBEAN 8900144	K87	04/04/89	King Grain Inc.
8900146	HS 266	04/11/89	GROMMARK Inc.
8900147	HS 358	04/11/89	GROWMARK Inc.
8900148	HS 2455	04/11/89	GROMMARK Inc.
8900149	HS 2821	04/11/89	GROWMARK Inc.

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< > Identifies temporary designations.

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APPLICATIONS RECEIVED
APRIL 1, 1989 TO JUNE 30, 1989

NAME OF APPLICANT	GROWMARK Inc.	Jacob Hartz Seed Company, Inc.	Jacob Hartz Seed Company, Inc.	Pioneer Hi-Bred International, Inc.						
GEN. APPL. (*) DATE	04/11/89	04/12/89	04/12/89	04/17/89	04/17/89	04/17/89	04/17/89	04/17/89	04/17/89	
VARIETY	(Continued) HS 4011	Hartz 6200	Hartz 6686	9121	9302	9303	9341	9411	9461	
APPL. NO.	SOYBEAN 8900150	8900154	8900155	8900172	8900173	8900174	8900175	8900176	8900177	

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APPLICATIONS RECEIVED
APRIL 1, 1989 TO JUNE 30, 1989

APPL. NO.	VARIETY	GEN. APPL. (*) DATE	NAME OF APPLICANT
SOYBEAN 8900178	SOYBEAN (Continued) 1900178 9582		Pioneer Hi-Bred International, Inc.
8900179	9592	04/17/89	Pioneer Hi-Bred International, Inc.
8900180	9711	04/17/89	Pioneer Hi-Bred International, Inc.
8900194	Burlison	04/24/89	Illinois Agricultural Experiment Station
8900209	807–80	05/15/89	Northrup King Co.
8900210	S17-18	05/15/89	Northrup King Co.
8900211	S19 - 90	05/15/89	Northrup King Co.
8900212	S20 - 26	05/15/89	Northrup King Co.
8900213	S30-41	05/15/89	Northrup King Co.

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< > Identifies temporary designations.

APPLICATIONS RECEIVED APRIL 1, 1989 TO JUNE 30, 1989

NAME OF APPLICANT	Northrup King Co.	Northrup King Co.	Asgrow Seed Company	Asgrow Seed Company	Jacob Hartz Seed Company, Inc.	Dr. Ir. E. Sahin, c/o K. Sahin, Zadon BV	Ferry-Morse Seed Company
GEN. APPL. (*) DATE		05/15/89	05/11/89	68/80/90	06/26/89	04/13/89	05/10/89
VARIETY	(Continued) S31-33	S42 - 50	A1929	A3322	Hartz 6372	Sunspot	Enduro
APPL. NO.	SOYBEAN (0 8900214	8900215	8900218	8900244	8900264	SUNFLOWER 8900168	TOMATO 8900204

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APPLICATIONS RECEIVED
APRIL 1, 1989 TO JUNE 30, 1989

	Inc.	Inc.	Experiment	Experiment
NAME OF APPLICANT	Pioneer Hi-Bred International, Inc.	Pioneer Hi-Bred International, Inc.	Purdue University Agricultural Experiment Station	Purdue University Agricultural Experiment Station
GEN. APPL. (*) DATE	68/60/20	68/60/50	06/01/89	68/10/90
VARIETY	COMMON 2163	<xw1.71></xw1.71>	INW8841	INW8852
APPL. NO.	WHEAT, 0	8900206	8900231	8900232

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

APPLICATIONS AMENDED APRIL 1, 1989 TO JUNE 30, 1989

Information concerning the varieties below has been published previously in the Official Journal's list of "APPLICATIONS RECEIVED." During the examination process, the applicant requested this information amended as indicated below.

NAME OF APPLICANT	
GEN. APPL. (*) DATE	
(*)	
VARLETY	
APPL. NO.	OAT

Name of owner changed from Harpool Seed Inc. to Arkansas County Seed Co., Inc.

8400135 833

07/02/84 Arkansas County Seed Co., Inc.

(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed. < > Identifies temporary designations.

APPLICATIONS ABANDONED, WITHDRAWN, DENIED, OR INELIGIBLE

Variety Protection Act, varieties published in this list may possibly be protected under the Patent Applications for the varieties listed below are no longer being considered for U.S. plant variety protection. Although propagation of these varieties is no longer prohibited by the U.S. Plant APRIL 1, 1989 TO JUNE 30, 1989

UETY	.35	
VAR	DSR-135	Pacer
C66 VARIETY		
APPL. NO.	9900088	3800054
APPL	880	880
KTND	SOYBEAN	WHEAT, COMMON

< > Identifies temporary designations.

NSIRUCIIONS

are self-explanatory unless noted below. Corrections on the Application form and Exhibits must be initialed and dated application and other requirements to: Plant Variety Protection Office, AMS, USDA, Rm. 500, NAL Building, 10301 amount of \$2,150 (\$250 filing fee and \$1,900 examination fee). (See section 180.175 of the Regulations and Rules of payable to "Treasurer of the United States" in the amount of \$250 for issuance of the Certificate. DO NOT use masking materials to make corrections. If a Certificate is allowed, you will be requested to send a check Baltimore Blvd., Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the Application Practice.) Partial applications will be held in the PVPO for 30 days, then returned to the applicant as unfiled. Mai least 2,500 viable untreated seeds; (4) check, drawn on a U.S. bank, payable to "Treasurer of the United States" in the be received in the PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A,B,C,E; (3) at GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must

Plant Variety Protection Office Telephone: 301/344-2518

TEM

- Give the date when there has been at least a tentative determination that the variety has been sexually determined. [See section 41(d) of the Plant Variety Protection Act (Act).] reproduced with recognized characteristics, whether or not the novelty of those characteristics has been
- Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding evidence of uniformity and stability. (See sections 41 and 52 of the Act.) variants during reproduction and multiplication and state how these variants may be identified and (4) method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of
- characters expressed numerically and demonstrate that these are clear differences; and (3) submit, if helpful, Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished seed and plant specimens or photographs of seed and plant comparisons which clearly indicate novelty varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for from all other varieties in the same crop. If the new variety most closely resembles one or a group of related

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Public reporting builden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department Agriculture, Clearance Office, DIRM, Room 404-W, Washington, D.C. 20250, and to the Office of Management and Budget, Paperwork Reduction Project (OMB #0581-0055), Washington, 20250

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE Information is held confidential until certificate is issued (7 U.S.C. 2426) (Instructions on reverse) 1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) 3 VARIETY NAME TEMPORARY DESIGNATION OR EXPERIMENTAL NO. 4 ADDRESS (street and no. or R.F.D. no., city, state, and ZIP) 5 PHONE (Includo area code) FOR OFFICIAL USE ONLY PVPO NUMBER Date 6. GENUS AND SPECIES NAME FAMILY NAME (Botanical) Time AM PM G Filing and Examination Fee B CROP KIND NAME (Common Name) 9 DATE OF DETERMINATION Date 10 IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) R Certificate Fee 11 IF INCORPORATED, GIVE STATE OF INCORPORATION 12 DATE OF INCORPORATION Date 13 NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS PHONE (Include area code) 14 CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on roverse) Exhibit A, Origin and Breeding History of the Vallety b Exhibit B, Novelty Statement П Exhibit C, Objective Description of Variety Exhibit O, Additional Description of Vallety Exhibit E, Statement of the Basis of Applicant's Ownership Seed Sample (2,500 yiable untileated seeds) Date Seed Sample mailed to Plant Variety Protection Office Filing and Examination Fee (\$2,150) made payable to "Treasurer of the United States" 15 DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See section 83(a) of the Plant Variety Protection Act.) YES (II "YES" answer items 16 and 17 below) NO (If "NO," skip to item 18 below) 16 DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? 17 IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEEO? CERTIFIED REGISTERED YES □ NO FOUNDATION 18 OID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.? YES (II "YES," Ihrough Plant Variety Protectron Act Patent Act Give date ___ □ NO 19 HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES? YES (II "YES," give names of countries and dates) 20 The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replemshed upon request in accordance with such regulations as may be applicable. The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act. Applicants) is (are) informed that false representation herein can jeopardize protection and result in penalties. DATE CAPACITY OR TITLE SIGNATURE OF APPLICANT (Owner(s)) DATE CAPACITY OR TITLE SIGNATURE OF APPLICANT (Owner(s))

- characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the Optional additional characteristics and/or photographs: Describe any additional characteristics that cannot be
- Section 52(4) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. inheritance, etc The applicant may be the actual breeder, the employer of the breeder, the owner through purchase or
- 5 published, or the certificate issued. However, if "No" has been specified the applicant may change the choice. may NOT reverse this affirmative decision after the variety has either been sold and so labeled, the decision If "Yes" is specified (seed of this variety be sold by variety name only as a class of certified seed), the applicant (See section 180.16 of the Regulations and Rules of Practice.)
- 19. See sections 41 (i, j) and 42 of the Act and section 180.7 of the Regulations and Rules of Practice for eligibility

MOTES:

address. The fee for filing a change of ownership or assignment is \$25. [See section 101 of the Act, and sections ownership or assignment during the life of the application/certificate. There is no charge for filing a change of It is the responsibility of the applicant/owner to keep the PVPO informed of any change of address or change of 180.130, 180.131, 180.132, and 180.175(h) of the Regulations and Rules of Practice.

contacting: Seed Branch, AMS, USDA, Rm. 213, Building 306, Beltsville Agricultural Research Center -- East, To avoid conflict with other variety names in use, the applicant should check the variety names proposed by Beltsville, MID 20705. Telephone: 301/344-2089.

CERT.	VARIETY	(*)	ISSUE	NAME OF OMNER
BEAN, FIELD				
8800115 Bill Z	0115 Bill Z (3) 06/30/89 Colorado State University	(3)	68/08/90	Colorado State University
1Bill	. Z' is most similar to 'Olathe'; how	ver, 'Bi	.11 Z' has	darker dry seed coat color
than	than 'Olathe'. 'Bill Z' is also more resistant than 'Olathe' to rust isolates from	stant th	an 'Olathe	e' to rust isolates from
Sagir	Saginaw, Michigan.			

BEAN, GARDEN

04/28/89 Rogers Brothers Seed Company 'Venture' is most similar to 'Provider' but differs primarily in seed coat color 'Venture' has white seeds whereas 'Provider' has purple seeds. 8600052 Venture

CORN, FIELD

'NS501' is most similar to 'A634'; however, 'NS501' has 7 more tassel branches per plant 04/28/89 United AgriSeeds, Inc. and has a strong 2-ear tendency whereas 'A634' has only one ear per plant. 8800149 NS501

'00603' is most similar to 'A632'; however, '00603' has 5 less lateral tassel branches per 04/28/89 United AgriSeeds, Inc. plant with a lesser branch angle than 'A632'. 8800150 00603

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NAME OF OWNER	
GEN. ISSUE	
GEN. (*)	
VARIETY	
CERT.	

8700185 CT Pinkeye Purplehull

185 CT Pinkeye Purplehull (Appleaut) 04/28/89 C. T. Smith Company CT Pinkeye Purplehull is most similar to 'Pinkeye Purplehull BVR'; however, seeds of 'CT Pinkeye Purplehull' have a heavily wrinkled testa, whereas seeds of 'Pinkeye Purplehull BVR' have a smooth to rough testa.

8800123 Maximize

06/30/89 Pure-Seed Testing, Inc.

'Maximize' most closely resembles 'Kentucky 31', 'Fawn', 'Kenhy', and 'Festorina'; however, 'Maximize' has 6.0 cm (4.1-9.6) shorter plant height and 11.0 cm (7.8-14.5) lower flag leaf than 'Kentucky 31'. 'Maximize' has a \hat{c} day (2-10) later 50% heading date than 'Fawn', 8 day (2-12) earlier heading date than 'Kenhy', and 13 day (7-18) earlier heading date than 'Festorina'. 'Maximize' is resistant to crown rust whereas 'Fawn' is susceptible.

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

NAME OF OMNER	06/30/89 Pure-Seed Testing, Inc. ', and 'Rebel'; however, 'Amigo' has a nan 'Apache' and 7 days (4-10) earlier ght 7.0 cm (4.5-20.6 cm) lower than and 7.1 cm (3.9-10.3 cm) lower than and 7.1 cm (3.9-10.3 cm) lower than 'e cm (0.6-5.4 cm) shorter than 'Rebel'	06/30/89 Pure-Seed Testing, Inc.
GEN. ISSUE (*)	06/30/89 , and 'Re han 'Apach jht 7.0 cm and 7.1	68/08/90
GEN.	'Bonanza' earlier th leaf heig ''Rebel', length 2.	
VARIETY	PESCUE, TALL (Continued) 8800132 Amigo 'Amigo' most closely resembles 'Apache', 'Bonanza', and 'Rebel'; however, 'Amigo' has a mean 50% heading date 4 days (3-5 days) earlier than 'Apache' and 7 days (4-10) earlier than 'Bonanza'. 'Amigo' has a mean flag leaf height 7.0 cm (4.5-20.6 cm) lower than 'Apache', 7.5 cm (4.9-11.3 cm) lower than 'Rebel', and 7.1 cm (3.9-10.3 cm) lower than 'Bonanza'. 'Amigo' has a mean internode length 2.9 cm (0.6-5.4 cm) shorter than 'Rebel' and 1.4 cm (0.2-2.7 cm) shorter than 'Bonanza'.	8800135 Murietta
CERT. NO.	FESCUE, TALL (Contine 8800132 Amigo 'Amigo' mos mean 50% hethan 'Bonan 'Apache', 7 'Bonanza', and 1.4 cm	8800135

(11 α), 'Jaguar' (15 α), and 'Bonanza' (20 α). 'Murietta' also has a 50% heading date however, 'Murietta' mature plant height is shorter than 'Olympic' (28 cm), 'Trailbhazer' 'Murietta' most closely resembles 'Olympic', 'Trailblazer', 'Jaquar', and 'Bonanza', 10 days later than 'Olympic' and 'Trailblazer'.

ETTUCE

'Green Bowl' is most similar to 'Salad Bowl'; however, 'Green Bowl' is darker green in 04/28/89 Asgrow Seed Company color (146B vs 144B, Royal Horticultural Society Colour Chart). 8800051 Green Bowl

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

ISSUE NAME OF OWNER DATE	(Continued) 027 Primavera Primavera' is most similar to 'Early Giant'; however, 'Primavera' has brown seed whereas 'Early Giant' has black seed.	06/30/89 Genecorp, Inc. 'Atlas' is most similar to 'Greengo'; however, 'Atlas' has black seed and 'Greengo' has white seed.	148 Sharkey (3) 04/28/89 Mississippi Agricultural & Forestry Experiment Station 'Tracy-M'; however, 'Sharkey' matures 3 to 4 days later than 'Tracy-M';	187 CX458 'CX458' most closely resembles 'A4595'; however, 'CX458' has brown pods whereas 'A4595' nas tan pods.
GEN.	Cimilar to 'Early Giant'; howev ck seed.	C ar to 'Greengo'; however, 'Atl	(3) Cilar to 'Tracy-M'; however, 'S	c resembles 'A4595'; however, 'C
NO.	LETTUCE (Continued) 8900027 Primavera 'Primavera' is most similar to 'Early Giant' has black seed.	8900029 Atlas 'Atlas' is most simila white seed.	SOYBEAN 8800148 Sharkey 'Sharkey' is most sim'	8800187 CX458 'CX458' most closely I has tan pods.

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

ISSUE NAME OF OWNER DATE	04/28/89 DeKalb-Pfizer Genetics CX298' has tawny pubescence and black fect black hila.	04/28/89 Nickerson American Plant Breeders,	inc. 1650' has brown pods whereas 'AP	04/28/89 Nickerson American Plant Breeders, Inc.	1989' is resistant to iron deficiency
. 1	04 , 'CX perfe	8	, 'AP	04	, 'AP
CERT, VARIETY GEN NO. (*)	SOYBEAN (Continued) 8800188 CX298 'CX298' most closely resembles 'A2943'; however, 'CX298' has tawny pubescence and black hila whereas 'A2943' has gray pubescence and imperfect black hila.	8900009 AP 1650	'AP 1650' is most similar to 'AP 1776'; however, 'AP 1650' has brown pods whereas 'AP 1776' has tan pods.	8900010 AP 1989	'AP 1989' is most similar to 'Vickery'; however, 'AP 1989' is resistant to iron deficiency chlorosis whereas 'Vickery' is susceptible.

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

NAME OF CWINER	
ISSOE	DATE
GEN.	*
VARIETY	
CERT.	NO.

SUNFLOWER 8800180 687

'687' is most similar to 'RHA 274'; however, '687' has shorter and wider seed than 'RHA 06/30/89 Cargill, Inc.

WHEAT, COMMOIN

8800122 Dynasty

(3) 04/28/89 The Ohio State University
Ohio Agricultural Research and

'687' also has a shorter plant height at

274' (7 mm L & 5 mm W vs 10 mm L & 4 mm W). harvest than 'RHA 274' (85 cm vs 127 cm).

'Dynasty' most closely resembles 'Hart'; however, 'Dynasty' possesses superior resistance infected). 'Dynasty' is susceptible to Hessian fly biotypes A and C whereas 'Hart' is to leaf rust (4 vs 47% leaf area infected) and powdery mildew (15 vs 68% leaf area Development Center

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

NAME OF OWNER	DURUM 0232 Imperial (*) 04/28/89 Western Plant Breeders 'Imperial' most closely resembles 'WestBred 1000D', 'WestBred Turbo', and 'Yavaros
GEN. ISSUE	04/28/89
(* (*)	(*) 1000D
	WestBred
	resembles
2	closely
VARIETY	Imperial rial' most
CERT.	WHEAT, DURUM 8800232 Imperial 'Imperial' mos

internode. 'Imperial' is 1 to 8 days later flowering than 'Yavaros 79' and has a higher percentage (94 vs 69%) of hard amber vitreous kernels and brighter semolina color (1.2 vs kernels with amber color and brighter semolina color (1.2 vs 3.3 on a visual scale where = bright yellow and 5 = dull, faint yellow) than 'WestBred 1000D'. 'WestBred 1000D' has acute glume beaks and rounded cheeks on the kernels. 'Imperial' has non-fading awns, rs, Inc. os 79'; however, 'Imperial' is 6 cm taller than 'WestBred 1000D' and has acuminate glume beaks, 'WestBred Turbo' fade and it has twisted flag leaves and no hairs on the last rachis angular cheeks on the kernels, and a higher percentage (94 vs 64%) of hard vitreous non-twisted flag leaves and hairs on the last rachis internode whereas the awns of 2.9) than 'Yavaros 79'.

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

APRIL 1, 1989 TO JUNE 30, 1989 CERTIFICATES AMENDED

The following certificates have been amended in accordance with sections 180.103, 180.122, and 180.130 of the Regulations and Rules of Practice under the Plant Variety Protection Act.

NAME OF OWNER ISSUE DATE GEN. * VARIETY CERT. œ.

10/31/88 Big Heart Seed ARTICHOKE

Name of owner changed from J. R. Jordan to Big Heart Seed.

Big Heart XR-1

8800071

7400104 Lake Largo BEAN, GARDEN

09/30/74 Rogers Brothers Seed Company

Name of owner changed from Sunseeds Genetics, Inc. to Rogers Brothers Seed Company.

Name of owner changed from Sunseeds Genetics, Inc. to Rogers Brothers Seed Company.

8100175 Broker's Choice

04/28/83 Rogers Brothers Seed Company

(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

< > Identifies temporary designations.

CERTIFICATES AMENDED APRIL 1, 1989 TO JUNE 30, 1989

The following certificates have been amended in accordance with sections 180:103, 180:122, and 180.130 of the Regulations and Rules of Practice under the Plant Variety Protection Act.

NAME OF OWNER		
GEN. ISSUE	DATE	
S S	*	
VARIETY		
CERT.	NO.	FESCUE. TALL

06/30/89 Pure-Seed Testing, Inc.

Variety with temporary designation of <5HF> named 'Amigo'.

8800132 Amigo

PEA

8700022 Blizzard

06/30/87 Rogers Brothers Seed Company

Name of owner changed from Sunseeds Genetics, Inc. to Rogers Brothers Seed Company.

^(*) To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed.

REQUEST FROM THE NATIONAL SEED STORAGE LABORATORY FORT COLLINS, COLORADO

The National Seed Storage Laboratory encourages plant breeders to send a sample of cultivars being protected under PVPO to the NSSL to be placed in the Base collection at NSSL for long-term storage and in the Working collection at the appropriate Regional Plant Introduction Station.

When placed in the Base and Working collections of the National Plant Germplasm System, samples of these protected cultivars would be available to all bonafide scientists for research purposes only. The official PVP sample, which is stored at the NSSL, is a reference sample retained for use by the PVPO only and is not available for distribution.

Please consider this request to make your protected genetic materials available to the scientists of the world for research purposes.

STEVE A. EBERHART Director LOREN E. WIESNER Curator

U.S.D.A., ARS
NATIONAL SEED STORAGE LABORATORY
Colorado State University Campus
Fort Collins, Colorado 80523
Telephone: 303/484-0402

Please label the sample by variety name, genus, and species and identify it as a separate sample contribution to the NSSL Base collection — specify it is a PVP-protected variety. Requested seed numbers for NSSL are 7,500 seeds. NSSL Base collection samples should be sent to the NSSL at the above address; however, be sure that samples sent with PVP application are sent to the PVPO address.

DESCRIPTION OF PUBLIC VARIETIES

In accordance with section 180.800 of the Plant Variety Protection Act, descriptions of "public varieties" voluntarily submitted on PVP objective description forms will be accepted for publication in the PVP Official Journal. Publication of such descriptions in no way constitutes recognition of the variety as novel or entitles it to protection under the Plant Variety Protection Act.

The following are descriptions of public varieties of inbred corn lines developed by Dr. M. M. Goodman, Professor of Crop Science at North Carolina State University.

The "PV Number" assigned to each variety should not be construed as meaning the variety is protected under the PVP Act; it is merely the accession number of that variety in the Office's database of corn variety descriptions.

Requests for seed samples and further information about these seven cultivars should be directed to Dr. R. J. Kuhr, Director, North Carolina Agricultural Research Service, P. O. Box 7643, Raleigh, North Carolina 27695-7643.

Variety Name: 'NC 262A'

PV Number: 8910001

'NC262A' was developed from TZ, a cross between NcNair inbred lines 14 and 18, which was used as the female parent of 'McNair X300'. Both McNair inbred line 14 and 18 were developed by the late Alexander Fitzgerald from Coker 811A x C103⁴. 'NC262A' is a sister line of 'NC262' with greater resistance to ear diseases and higher yield potential in hybrid combinations and combines well with inbred lines of Iowa Stiff Stalk origin, such as 'A632', 'B73', and 'NC256'. 'NC262A' contributes better seed quality to the only available short, southern adapted C103-type line, 'NC262'. 'NC276' was released by North Carolina ARS in February 1989.

Breeder: Dr. M. M. Goodman (NCSU Professor, Crop Science)

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Kernel Type
                                    Dry Ear Length
                Dent
                                                       14 cm
                                    Dry Ear Diameter
Adapted Area
                 SE USA
                                                       41 mm
                                    Dry Ear Weight
                                                       85 g
Chromosome No.
                Diploid
Days to Mid Silk 72
                                    No. Kernel Rows/Ear 16
Heat Units to
                                    Row Distinctness Distinct
                 1500
 Mid Silk
                                   Row Straightness
                                                       Straight
Plant Height
                156 cm
                                   Exposed Silk Color Green
Ear Height
                36 cm
                                   Fresh Husk Color
                                                       Light green
Internode Lgth
                11 cm
                                   Dry Husk Color
                                                       Buff
                                   Husk Extension
                None
Tillers/Plant
                Strong 2-ear
Ears/Plant
                                     Beyond Ear
                                                       Barely
Cytoplasm Type
                Normal
                                   Husk Leaf Length
                                                       < 8 cm
Leaf Color
                                    Ear Shank Length
                                                       4 cm
                Dark green
Leaf Angle
                30 - 60 degree
                                    No Shank
Leaf Sheath
                                      Internodes
                                                       4
 Pubescence
                Light
                                    Dry Ear Position
                                                       Upright
                                    Ear Taper
Ear Drying Time
Leaf Marginal
                                                       Slight
 Waves
                Few
                                                       Slow
Leaf Creases
                Few
                                    Dry Kernel Length
                                                      10 mm
Leaf Width
                 10
                                    Dry Kernel Width
                                                       8 mm
Leaf Length
                 69
                                    Dry Kernel Thickness 5 mm
Lf. No./Plant
                12
                                    Kernel Shape Grade <20% Rounds
Tassel Branch
                                    Pericarp Color
                                                       Colorless
 No./Plant
                                    Aleurone Color
                                                       White
Tassel Branch
                                    Endosperm Color
                                                       Pale yellow
                                   Endosperm Type
 Angle
                 < 30 degree
                                                      Normal starch
Peduncle Lgth
                22 cm
                                   Seed Weight
                                                       26 g/100
                                    Cob Mid Point Dia. 27 mm
Pollen Shed
                Light
Anther Color
                 Yellow
                                    Cob Strength
                                                       Strong
Glume Color
                 Green
                                    Cob Color
                                                       Red
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<u>Plant Diseases:</u> Resistant to Southern Leaf Blight (caused by <u>Bipolaris maydis</u>), Anthracnose (caused by <u>Colletotrichum graminicola</u>), Gray Leaf Spot (caused by <u>Cercospora zeae-maydis</u>), and Common Smut.

Variety Name: 'NC280'

'NC280', a sister line of 'NC252', was derived from 161-1(83), an S_5 subline of 'BB11' derived from B73 x Pa91 by selfing using the ear-to-row method. It was yield-tested for 3 years (1985-1987) at 3 locations in North Carolina using 4 inbred lines ('Mo17', 'NC258', 'NC262', and 'Oh43E') as testers. 'NC280' provides high yield potential, good lodging resistance, and good seed quality in a 'B73' background that is well adapted to the upper south. It can serve well as male or female parent of single-cross hybrids. 'NC280' was released by the North Carolina ARS in February 1989.

PV Number: 8910002

Breeder: Dr. M. M. Goodman, (NCSU Professor, Crop Science)

Kernel Type Adapted Area Chromosome No.	Dent SE USA Diploid	Dry Ear Diameter Dry Ear Weight No. Kernel Rows/Ear	43 mm 97 g c 18
Days to Mid Silk Heat Units to	76	Row Distinctness Row Straightness	Distinct Slightly
Mid Silk	1625		curved
Plant Height	188 cm	Exposed Silk Color	Green
Ear Height	57 cm	Fresh Husk Color	Light green
Internode Length	13 cm	Dry Husk Color	Buff
Tillers/Plant	None	Husk Extension	
Ears/Plant	Slight 2-ear	Beyond Ear	Barley
Cytoplasm Type	Normal	Husk Leaf Length	< 8 cm
Leaf Color	Dark green	Ear Shank Length	8 cm
Leaf Angle	<30 degrees	No Shank	
Leaf Sheath		Internodes	5
Pubescence	Medium	Dry Ear Position	Upright
Leaf Marginal		Ear Taper	Average
Waves	Few	Ear Drying Time	Average
Leaf Creases	Absent	Dry Kernel Length	9 mm
Leaf Width	9	Dry Kernel Width	7 mm
Leaf Length	69	Dry Kernel Thicknes	ss 5 mm
Lf. No./Plant	11	Kernel Shape Grade	20-40% Rounds
Tassel Branch		Pericarp Color	Colorless
No./Plant	8	Aleurone Color	White
Tassel Branch		Endosperm Color	Yellow
Angle	<30 degrees	Endosperm Type	Normal
Peduncle Length	26 cm		starch
Pollen Shed	Medium	Seed Weight	24 g/100
Anther Color	Yellow	Cob Mid Point Dia.	27 mm
Glume Color	Green	Cob Strength	Strong
Dry Ear Length	15 cm	Cob Color	Pink

 $\frac{\text{Plant Diseases:}}{\text{Spot (caused by }} \underbrace{\text{Resistant to Common Smut, and susceptible to Gray Leaf}}_{\text{Zeac-maydis}}).$

Variety Name: 'NC282'

PV Number: 8910003

'NC282' was derived from 111-1(83), an S₅ line from B73³ x Pa91. It was yield-tested (as BB12) for 3 years (1985-1987) at 3 locations in North Carolina using 4 inbred lines ('Mo17', 'NC258', 'NC262', and 'Oh43E') as testers. 'NC282' combined best with 'NC262' in the above tests. It has maturity, yield, and plant type similar to 'B73', but has higher seed quality. 'NC282' can serve well as male or female parent of single-cross hybrids. 'NC282' was released by the North Carolina ARS in February 1989.

Breeder: Dr. M. M. Goodman (NCSU Professor, Crop Science)

Kernel Type Adapted Area Chromosome No. Days to Mid Silk Heat Units to Mid Silk Plant Height Ear Height Internode Length	1550 201 cm 67 cm	Dry Ear Diameter Dry Ear Weight No. Kernel Rows/Ea Row Distinctness Row Straightness Exposed Silk Color Fresh Husk Color Dry Husk Color Husk Extension	Distinct Straight
Tillers/Plant	None		Dawless
Ears/Plant	Slight 2-ear	Beyond Ear Husk Leaf Length	Barley < 8 cm
Cytoplasm Type	Normal	Ear Shank Length	4 cm
Leaf Color	Dark green	No Shank	4 Cm
Leaf Angle	<30 degrees	Internodes	3
Leaf Sheath		Dry Ear Position	Upright
Pubescence	Medium	Ear Taper	Average
Leaf Marginal		Ear Drying Time	Average
Waves	Few	Dry Kernel Length	8 mm
Leaf Creases	Absent	Dry Kernel Width	8 mm
Leaf Width	11	Dry Kernel Thickne	ss 5 mm
Leaf Length	72	Kernel Shape Grade	20-40% Rounds
Lf. No./Plant	11	Pericarp Color	Colorless
Tassel Branch		Aleurone Color	White
No./Plant	5	Endosperm Color	Yellow
Tassel Branch		Endosperm Type	Normal
Angle	<30 degrees		starch
Peduncle Length	26 cm	Seed Weight	24 g/100
Pollen Shed	Medium	Cob Mid Point Dia.	31 mm
Anther Color	Yellow	Cob Strength	Strong
Glume Color	Green	Cob Color	Pink
Dry Ear Length	15 cm		

Plant Diseases: Resistant to Common Smut, and susceptible to Gray Leaf Spot (caused by Cercospora zeae-maydis).

Variety Name: 'NC284'

PV Number: 8910004

'NC284' was derived from 125-1(83), an S5 line from B73³ x Pa91. It was yield-tested (as BB21) for 3 years (1985-1987) at 3 locations in North Carolina using 4 inbred lines ('Mo17', 'NC258', 'NC262', and 'Oh43E') as testers. 'NC284' is a B73-type line with very good lodging resistance, prolificacy, and high yield potential. 'NC284' was released by the North Carolina AES in February 1989.

Breeder: Dr. M. M. Goodman (NCSU Professor, Crop Science)

Kernel Type Adapted Area Chromosome No. Days to Mid Silk Heat Units to Mid Silk	Dent SE USA Diploid 73	Dry Ear Diameter Dry Ear Weight No. Kernel Rows/Ear Row Distinctness Row Straightness Exposed Silk Color	Distinct Straight
Plant Height	191 cm	Fresh Husk Color	Light green
Ear Height	82 cm	Dry Husk Color	Buff
Internode Lgth	12 cm	Husk Extension	
Tillers/Plant	None	Beyond Ear	Barley
Ears/Plant	Strong 2-ear	Husk Leaf Length	< 8 cm
Cytoplasm Type	Normal	Ear Shank Length	3 cm
Leaf Color	Dark green	No Shank	
Leaf Angle	<30 degrees	Internodes	3
Leaf Sheath		Dry Ear Position	Upright
Pubescence	Light	Ear Taper	Average
Leaf Marginal		Ear Drying Time	Average
Waves	Few	Dry Kernel Length	10 mm
Leaf Creases	Few	Dry Kernel Width	7 mm
Leaf Width	10	Dry Kernel Thicknes	
Leaf Length	72	Kernel Shape Grade	
Lf. No./Plant	10	Pericarp Color	Colorless
Tassel Branch		Aleurone Color	White
No./Plant	10	Endosperm Color	Yellow
Tassel Branch		Endosperm Type	Normal
Angle	<30 degrees		starch
Peduncle Lgth	20 cm	Seed Weight	20 g/100
Pollen Shed	Heavy	Cob Mid Point Dia.	26 mm
Anther Color	Yellow	Cob Strength	Strong
Glume Color	Green	Cob Color	Red
Dry Ear Length	14 cm		

 $\frac{\texttt{Plant Diseases:}}{\texttt{Spot (caused by Cercospora zeae-maydis)}}. \\ \texttt{Resistant to Common Smut, and susceptible to Gray Leaf}$

Variety Name: 'NC286'

'NC286' was derived from TZ^2 x [(NC248 x NC246) x C103]. Of the progenitors 'NC248' was largely (97%) derived from GT112. TZ, a cross between NcNair inbred lines 14 and 18, was the female parent of 'McNair X300'. Both McNair lines were derived from Coker 811A x C103⁴. 'NC286' is a short, southern-adapted flint line with good disease resistance and excellent yield potential. It has good lodging resistance and early flowering. 'NC286' is short with low ear height and good lodging resistance and combines well with lines of Staff Stalk Synthetic origin such as 'B73' and 'NC256'. 'NC286 was released by the North Carolina ARS in February 1989.

PV Number: 8910005

Breeder: Dr. M. M. Goodman (NCSU Professor, Crop Science)

Kernel Type Adapted Area Chromosome No. Days to Mid Silk Heat Units to Mid Silk Plant Height Ear Height Internode Lgth Tillers/Plant Ears/Plant Cytoplasm Type Leaf Color Leaf Angle	Flint SE USA Diploid 71 1475 166 cm 30 cm 12 cm None Slight 2-ear Normal Medium green 30-60	Dry Ear Diameter Dry Ear Weight No. Kernel Rows/Ea: Row Distinctness Row Straightness Exposed Silk Color Fresh Husk Color Dry Husk Color Husk Extension Beyond Ear Husk Leaf Length Ear Shank Length	37 mm 46 g r 14 Distinct Slightly curved Green Light green Buff 8-10 cm beyond ear < 8 cm 4 cm
	degrees	No Shank	
Leaf Sheath		Internodes	3
Pubescence Leaf Marginal	Light	Dry Ear Position Ear Taper	Upright Slight
Waves	Few	Ear Drying Time	Slow
Leaf Creases	Few	Dry Kernel Length	8 mm
Leaf Width	10	Dry Kernel Width	7 mm
Leaf Length	67	Dry Kernel Thickne	
Lf. No./Plant Tassel Branch	8	Kernel Shape Grade	40-60% Rounds Colorless
No./Plant	4	Pericarp Color Aleurone Color	White
Tassel Branch	•	Endosperm Color	Yellow
Angle	30-40	Endosperm Type	Normal
	degrees		starch
Peduncle Length	24 cm	Seed Weight	29 g/100
Pollen Shed	Medium	Cob Mid Point Dia.	
Anther Color	Yellow	Cob Strength	Strong
Glume Color	Green 14 cm	Cob Color	Red
Dry Ear Length	14 CIII		

Plant Diseases: Resistant to Southern Leaf Blight (caused by Bipolaris maydis), Gray Leaf Spot (caused by Cercospora zeae-maydis), and Common Smut.

Variety Name: 'NC288'

'NC288' was derived from TZ x [(NC248 x NC246) x C103]. Of the progenitors 'NC248' was largely (97%) derived from GT112; 'NC246' was 63% Gt112 and 25% T61 by pedigree. TZ, a cross between NcNair inbred lines 14 and 18, was the female parent of 'McNair X300'. Both McNair lines were derived from Coker 811A x C1034. 'NC288' has excellent disease resistance in a productive flint with adaptation throughout the South. It is most similar to 'NC258', but has red, rather than white, cobs and tends to dry-down more rapidly than 'NC258'. 'NC288' combines well with lines of Stiff Stalk Synthetic origin such as 'B73' and 'NC256'. 'NC288' was released by the North Carolina ARS in February 1989.

PV Number: 8910006

Breeder: Dr. M. M. Goodman (NCSU Professor Crop Science)

Kernel Type	Flint	Dry Ear Weight	55 g
Adapted Area	SE USA	No. Kernel Rows/Ear	: 14
Chromosome No.	Diploid	Row Distinctness	Indistinct
Days to Mid Silk	76	Row Straightness	Slightly
Heat Units to		_	curved
Mid Silk	1625	Exposed Silk Color	Green
Plant Height	188 cm	Fresh Husk Color	Light green
Ear Height	57 cm	Dry Husk Color	Buff
Internode Length	14 cm	Husk Extension	
Tillers/Plant	None	Beyond Ear	> 10 cm
Ears/Plant	Slight 2-ear	-	beyond ear
Cytoplasm Type	Normal	Husk Leaf Length	< 8 cm
Leaf Color	Medium green	Ear Shank Length	5 cm
Leaf Angle	<30 degrees	No Shank	
Leaf Sheath	-	Internodes	4
Pubescence	Light	Dry Ear Position	Upright
Leaf Marginal	_	Ear Taper	Average
Waves	Few	Ear Drying Time	Slow
Leaf Creases	Few	Dry Kernel Length	9 mm
Leaf Width	11	Dry Kernel Width	8 mm
Leaf Length	74	Dry Kernel Thicknes	
Lf. No./Plant	11	Kernel Shape Grade	20-40% Rounds
Tassel Branch		Pericarp Color	Colorless
No./Plant	21	Aleurone Color	White
Tassel Branch		Endosperm Color	Yellow
Angle	<30 degrees	Endosperm Type	Normal
Peduncle Length	20 cm		starch
Pollen Shed	Medium	Seed Weight	25 g/100
Anther Color	Yellow	Cob Mid Point Dia.	22 mm
Glume Color	Green	Cob Strength	Strong
Dry Ear Length	13 cm	Cob Color	Red
Dry Ear Diameter	34 mm		

Plant Diseases: Resistant to Southern Leaf Blight (caused by Bipolaris maydis), Gray Leaf Spot (caused by Cercospora zeae-maydis), and Common Smut.

Variety Name: 'NC290'

PV Number: 8910007

'NC262A' was developed from TZ, a cross between NcNair inbred lines 14 and 18, which was used as the female parent of 'McNair X300'. Both McNair inbred line 14 and 18 were developed by the late Alexander Fitzgerald from Coker 811A x C103⁴. 'NC290' is a short, early, widely adapted C103-type line with good resistance to gray leaf spot and southern leaf blight. It has adequate seed and pollen productivity to function as either a male or female parent, unlike the only similar lines, 'NC262' and 'NC262A'. 'NC290' is short with relatively small-low ears and combines well with inbred lines of Iowa Stiff Stalk origin, such as 'A632', 'B73', and 'NC256'. 'NC290' was released by North Carolina ARS in February 1989.

Breeder: Dr. M. M. Goodman (NCSU Professor, Crop Science)

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Kernel Type
                 Dent
                                      Dry Ear Length
                                                          14 cm
Adapted Area
                 SE USA
                                      Dry Ear Diameter
Dry Ear Weight
                                                          38 mm
                                                          66 q
Chromosome No.
                 Diploid
Days to Mid Silk 67
                                      No. Kernel Rows/Ear 14
Heat Units to
                                      Row Distinctness
                                                          Distinct
                 1400
  Mid Silk
                                      Row Straightness
                                                          Straight
Plant Height
                 161 cm
                                      Exposed Silk Color Green
Ear Height
                  36 cm
                                      Fresh Husk Color
                                                          Light green
Internode Length 10 cm
                                     Dry Husk Color
                                                          Buff
                                     Husk Extension
Tillers/Plant None
Ears/Plant
                 Slight 2-ear
                                       Beyond Ear
                                                          Barely
Cytoplasm Type
                                     Husk Leaf Length
                                                          < 8 cm
                 Normal
Leaf Color
Leaf Angle
                                      Ear Shank Length
                 Dark green
                                                          5 cm
                  30-60
                                      No Shank
                                        Internodes
                   degrees
Leaf Sheath
                                      Dry Ear Position
                                                         Upright
                 Light
                                      Ear Taper
  Pubescence
                                                          Average
Leaf Marginal
                                      Ear Drying Time
                                                          Slow
  Waves
                 Few
                                      Dry Kernel Length
                                                          9 mm
Leaf Creases
Leaf Width
                 Few
                                      Dry Kernel Width
                                                          9 mm
                                      Dry Kernel Thickness 7 mm
                 10
Leaf Length
                  66
                                     Kernel Shape Grade 20-40% Rounds
Lf. No./Plant
                 11
                                     Pericarp Color
                                                          Colorless
Tassel Branch
                                      Aleurone Color
                                                          White
  No./Plant
                                      Endosperm Color
                                                          Yellow
Tassel Branch
                                      Endosperm Type
                                                          Normal
                  < 30 degree
  Angle
                                                           starch
Peduncle Length
                  21 cm
                                      Seed Weight
                                                          29 g/100
Pollen Shed
                  Light
                                      Cob Mid Point Dia. 25 mm
Anther Color
                  Red
                                      Cob Strength
                                                          Strong
Glume Color
                 Green
                                      Cob Color
```

Plant Diseases: Resistant to Southern Leaf Blight (caused by Bipolaris maydis), Anthracnose (caused by Colletotrichum graminis), Gray Leaf Spot (caused by Cercospora Zeae-maydis), and Common Smut.

GENERAL INFORMATION

Dr. C. Rose Broome has joined the staff of the Plant Variety Protection Office as of June 5, 1989, as a Plant Variety Senior Examiner. Dr. Broome has her Ph.D. in Botany, and will be in charge of soybean, alfalfa, and lettuce as well as numerous other crops.





UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
PLANT VARIETY PROTECTION OFFICE
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